

**UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY**

ANTON PAAR OPTOTEC GMBH,

Plaintiff,

vs.

RUDOLPH RESEARCH ANALYTICAL, INC.,

Defendant.

Civil Action No. 16-3789

COMPLAINT AND JURY DEMAND

Plaintiff ANTON PAAR OPTOTEC GMBH (“Anton Paar”), by and through its attorneys, DLA Piper LLP (US), and against Defendant, RUDOLPH RESEARCH ANALYTICAL, INC. (“Rudolph”) hereby alleges as follows:

PRELIMINARY STATEMENT

1. This is an action for false advertising under the Federal Lanham Act, unfair competition, trade libel, and tortious interference with existing and prospective economic relations arising from Rudolph’s actions with regard to public statements it made about Anton Paar’s polarimeter in printed advertisements to consumers. A polarimeter is a scientific instrument used to measure the angle of rotation of the plane of polarization caused by passing polarized light through an optically active substance. Rudolph’s illegal acts have irreparably harmed the goodwill and reputation of Anton Paar and caused Anton Paar significant damages.

PARTIES

2. Anton Paar is a corporation organized and existing under the laws of Germany with its principal place of business located at Lise-Meitner-Str. 6, 30926 Seelze, Germany.

3. Upon information and belief, Rudolph is a corporation organized and existing under the laws of New Jersey with its principal place of business located at 55 Newburgh Road, Hackettstown, New Jersey 07840.

JURISDICTION AND VENUE

4. This Court has original jurisdiction over the subject matter of this action pursuant to 15 U.S.C. § 1121 and 28 U.S.C. §§ 1331 and 1332, and has supplemental jurisdiction pursuant to 28 U.S.C. § 1367(a). The amount in controversy is in excess of \$75,000 exclusive of interest and costs.

5. This Court has general personal jurisdiction over Rudolph by virtue of it transacting and doing business in the State of New Jersey. Moreover, the Court has specific personal jurisdiction because, upon information and belief, the wrongful acts by Rudolph alleged herein occurred entirely or primarily within the State of New Jersey.

6. Venue in this District is proper pursuant to 28 U.S.C. § 1391(b) because a substantial part of the events giving rise to the claims occurred in this judicial district.

BACKGROUND FACTS

Polarimeters in General

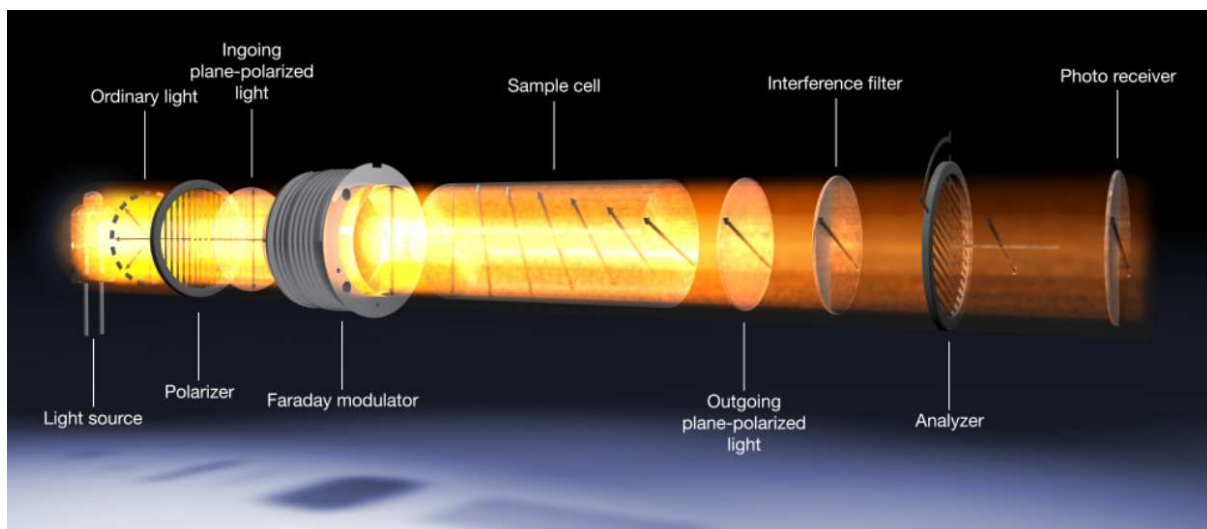
7. Some chemical substances, and in particular many organic molecules, are “optically active,” meaning that when polarized light is passed through such a substance, the light’s plane of polarization will rotate to the right or left. The angle of “optical rotation” is measured by an instrument called a polarimeter. Polarimeter measurements are typically used in industry to determine the concentration, purity, and quality of pharmaceuticals, sugars, starches, and flavors and fragrances. They are also used in research and governmental laboratories.

8. The list prices for new industrial polarimeters range from approximately \$8,500 to \$10,000 for an entry level model and approximately \$20,000 to \$25,000 for a higher end model.

Measuring Principle in Polarimeters

9. Polarimeters use a beam of polarized light to measure optical rotation of target substances. The light is initially passed through a filter (polarizer) to produce a beam with a known “plane of polarization.”

10. As the light passes through a sample cell of an optically active substance, the sample rotates the plane of polarization. The polarimeter measures the rotation angle. The following is a schematic illustration of the process of polarimetric measurement.



Traceability of Calibration

11. Instruments such as polarimeters must be calibrated in order to provide exact and reliable readings. In calibration, the polarimeter is used to measure the plane of polarization of a reference standard which rotates the plane of polarization by a known angle. If there is a divergence between the measurement and the known value, the polarimeter is adjusted until the known value is obtained in a subsequent measurement.

12. These reference standards are often made of quartz crystals and are commonly referred to as quartz control plates. Quartz control plates are used because they yield extremely accurate measurements, and the user can reuse the same quartz control plate many times over without any degradation of the plate.

13. To be useful, however, the quartz reference standards must themselves be accurate. To ensure accuracy, the manufacturer of the standards compares them to national standards provided by national metrological institutes. This documented chain of comparisons – instrument readings compared to quartz plates and quartz plates compared to national standards – is referred to as traceability. *See International Vocabulary of Basic and General Terms in Metrology and General Terms in Metrology (VIM 2: 1993): Traceability.*

14. Polarimeter measurement is essential to many industries. For example, in the pharmaceutical industry, whose products are regulated by the Federal Drug Administration, manufacturers must constantly check to ensure that the drugs they manufacture meet approved specifications of purity. Polarimeter measurements are part of this essential quality control process. In the sugar and flavor industries, the concentration and purity of substances are directly linked to profitability, and polarimeter measurement is always used as part of quality control. For these and other businesses that rely on polarimeter measurement, the traceability of reference substances used to calibrate polarimeters is essential.

Global Competition

15. Polarimeters are manufactured and sold globally by six major companies: Anton Paar, Rudolph, Jasco Corporation (Japan), Schmidt & Haensch GmbH & Co. (Germany), Atago Co., Ltd. (Japan), and Bellingham & Stanley (UK). There are also a small number of Asian manufacturers that serve their respective domestic markets.

16. Anton Paar and Rudolph are the two largest suppliers of polarimeters in the world.

Anton Paar's Quartz Control Plates Are Traceable to the PTB National Standard

17. The Anton Paar's quartz control plates are all traceable to standards provided by the Physikalisch-Technische Bundesanstalt ("PTB") in Braunschweig, Germany. The PTB is the German national metrological institute. *See* <https://www.ptb.de/cms/en/ptb/fachabteilungen/abt4/fb-42/ag-421/polarimetric-calibration-of-quartz-control-plates.html> (accessed on 04/04/2016). National metrological institutes are the highest level institutions providing traceability to the worldwide accepted SI unit system.

18. In manufacturing quartz control plates, Anton Paar utilizes a PTB-certified standard plate for factory calibration prior to sale. The identification number of the standard plate is stated in the certificate of the Anton Paar quartz plate. This provides the end customer with quartz control plates which are traceable to a national standard – the PTB.

19. In addition, Anton Paar offers customers the option to have their quartz plates calibrated directly at the PTB by PTB staff. This additional option, however, is not necessary or required to demonstrate traceability to the PTB.

Optical Rotation Calibration According to US and EU Pharmacopoeias

20. Pharmacopoeias are binding standards for pharmaceuticals. Among other things, pharmacopoeias define the measurements that manufacturers must perform on pharmaceuticals to conform to such standards. Pharmacopoeias also contain descriptions of the measuring methods that must be carried out, including the proper method to calibrate a polarimeter before measurement.

21. The US Pharmacopoeia (“USP”), which governs pharmaceuticals manufactured in the United States for use in the United States, recommends calibrating polarimeters with reference dextrose and sucrose from the Office of Standard Reference Materials, NIST, or, alternatively, the use of quartz control plates. *See* USPC Official 12/1/13 04/30/14 General Chapters: <781> OPTICAL ROTATION (2015).

22. The European Pharmacopoeia (“EP”) states, with regard to calibrating of polarimeters: “The scale is usually checked by means of certified quartz plates. The linearity of the scale may be checked by means of sucrose solutions.” *See* Ph. Eur. 8th Ed.: 2.2.7 Optical Rotation, p. 26 (2014).

23. Neither the USP nor the EP states that optical rotation should be tested at a minimum of three different points for purposes of calibration.

Traceable Temperature Calibration

24. Temperature is the largest external factor that can influence the measurement of optical rotation. As a result, temperature needs to be measured and controlled precisely during the measuring process. For this reason, Anton Paar quartz control plates are equipped with internal temperature sensors that communicate automatically and wirelessly with the instrument.

25. The use of internal temperature sensors is a technological advantage over polarimeters that utilize external temperature probes that are connected with a cable. When calibrating these polarimeters, the probe needs to be manually dipped into the sample cell and removed when the user takes the cells out of the instrument.

26. Temperature sensors also have to be calibrated in a traceable fashion, similar to optical rotation reference standards. This is done by Anton Paar service engineers by means of an external temperature sensor, which is connected to a reference thermometer. The temperature

sensor is inserted into the sample cell or quartz control plate assembly and facilitates a comparison of the temperature reading of the reference thermometer with the temperature reading of the internal temperature sensor of the quartz control plate assembly. In case of a discrepancy of both readings, the internal temperature sensor is adjusted so that it will yield correct results in subsequent measurements. The reference thermometer as well as the external temperature sensor are traceably calibrated.

Monitoring of the Sample Filling Process

27. In conducting polarimetry, the sample cell must first be filled with a solvent or water to set the polarimeter to the zero point prior to measurement. After that, the cell must be emptied and the solvent or water replaced with the actual sample to be measured.

28. To avoid potential errors in measurement due to air bubbles, or leftover solvent, water, or traces of previous samples, the Anton Paar polarimeter provides a video camera that permits direct live observation of the inside of the sample cell (the “Filling Check”). The user can thereby see more clearly into the sample cell than if the cell were examined by external visual observation.

29. In addition, a picture of the sample inside the cell can be automatically saved and documented together with the measuring result. No other manufacturer, including Rudolph, offers this technological advantage.

30. Rudolph’s polarimeter has an external mechanism that permits visual inspection for air bubbles. However, this mechanism, which is external to the cell (a) is less effective at detecting leftover water, solvent, or traces of prior samples, and (b) cannot document the condition of the sample cell by video or camera

Data Export and Communication

31. Anton Paar polarimeters have Ethernet connections so that a customer can export data directly from the device to the customer's data network and storage.

Rudolph's False and Misleading Statements About Anton Paar

32. In its advertising and promotional materials to prospective purchasers of polarimeters, Rudolph represented to potential customers that Anton Paar "almost never quotes traceable standards." True copies of examples of such statements by Rudolph are attached as Exhibits A and B. This statement is false, deceptive, and misleading. As set forth above, all Anton Paar polarimeter quartz control plates are traceable to the PTB.

33. Rudolph further represented that "Anton Paar only offers a quartz plate traceable to their factory . . . and, as an option, traceable to PTB which is a very expensive option." Exhibit A, Letter from Rudolph, at ¶ 1 This statement is false, deceptive and misleading. Anton Paar's standard factory-calibrated quartz plates are traceable to the PTB. While Anton Paar also offers calibration performed directly by the PTB as an additional option, this is not required to demonstrate traceability.

34. Rudolph also represents in its promotional literature that the USP and EP require "test[ing] optical rotation at a minimum of 3 different point." Exhibit A, Letter from Rudolph; Exhibit B, Bullet Points. This is false, deceptive, and misleading. In reality, the USP and the EP do not require the testing of optical rotation at a minimum of three different points.

35. Rudolph's statements in its promotional materials (see Exhibits A-B) that Anton Paar's temperature system for polarimeters is "not traceable," and that "Anton Paar does not offer a means to validate its heating and cooling system" are also false, deceptive and

misleading. Anton Paar service engineers calibrate the temperature system with a traceably calibrated precision thermometer and traceably calibrated temperature sensors. Moreover, a fully traceable temperature sensor can be inserted into the sample cell or quartz control plate. In this way, the quartz control plate can be traceably re-calibrated in the field at any time. Anton Paar offers a traceable re-calibration of the temperature measurement at the customer's site as a standard service.

36. Rudolph also claims that "Anton Paar's sample cells are so prone to air bubbles that Anton Paar introduced the built in camera into the system to avoid incorrect readings." Exhibit A, Rudolph Letter at ¶ 4; Exhibit B, Bullet Points. This statement is false, deceptive and misleading. First, Anton Paar's sample cells are no more prone to air bubbles than any comparable manufacturer's sample cells. Rudolph itself has an external mechanism to permit visual inspection for possible air bubbles in its own sample cells. Second, the use of the built-in camera in Anton Paar's sample cells is not to cure some defect in the cells, but to provide a more convenient and more accurate means of inspection for air bubbles, solvent or water, or traces of prior samples.

37. Last, Rudolph's statement that "Rudolph is the only brand whose polarimeter allows direct connection to the customer's server or LIMS" is false. Exhibit A, Rudolph Letter at ¶ 3. Anton Paar's polarimeters have Ethernet connections so that customers can export measurements to their internal data systems and storage.

Anton Paar's Efforts to Resolve the Dispute

38. Anton Paar has given Rudolph ample opportunity to correct Rudolph's false, deceptive and misleading statements concerning Anton Paar's products made in Rudolph's promotion and advertising.

39. Specifically, on December 23, 2015, shortly after it learned about Rudolph's statements, Anton Paar contacted Rudolph to demand that Rudolph correct its false, deceptive and misleading statements concerning Anton Paar's products and Rudolph's own products. Exhibit C, Letter dated December 23, 2015.

40. Rudolph never responded to the letter and, upon information and belief, has continued to make similar false, deceptive and misleading statements concerning Anton Paar's products and Rudolph's own products.

COUNT I
(False Advertising Under Section 43(a) of the Lanham Act, 15 U.S.C. § 1125(a))

41. Anton Paar realleges and incorporates paragraphs 1 through 40 hereof, as though fully set forth herein.

42. Rudolph's statements, as alleged above, are false, deceptive and misleading statements of fact that are either literally false or are likely to mislead, confuse, or deceive potential purchasers of Anton Paar's products.

43. Rudolph's statements, as alleged above, misrepresent the nature, characteristics and qualities of Anton Paar and Rudolph's goods.

44. Rudolph's statements, as alleged above, are made in commercial advertising or promotion within the meaning of 15 U.S.C. § 1125(a)(1)(B).

45. Rudolph's statements, as alleged above, are material in that they (a) are literally false, and are therefore presumed to be material, or (b) if literally true but misleading, are likely to affect the purchasing decisions of consumers of polarimeters and quartz control plates.

46. Rudolph's statements, as alleged above, were made in, and affect products that are in interstate commerce.

47. Upon information and belief, Rudolph continues to make the statements alleged above and similar materially false, deceptive, and misleading statements about Anton Paar and Rudolph's products in commercial advertising and promotion.

48. Rudolph's statements, as alleged above, have caused, and unless enjoined by the Court, will continue to cause great and irreparable injury to Anton Paar, for which Anton Paar has no adequate remedy at law.

49. Rudolph's statements, as alleged above, violate Section 43(a) of the Lanham Act, 15 U.S.C. § 1125(a).

50. By reason of the foregoing, Anton Paar is entitled to preliminary and permanent injunctive relief against Rudolph, restraining further violations by Rudolph of 15 U.S.C. § 1125(a), an award of Rudolph's profits, damages in the amount of three times the actual damages sustained by Anton Paar, and the costs of this action, including reasonable attorney fees, all in an amount to be determined at trial.

COUNT II
(Common Law False Advertising)

51. Anton Paar realleges and incorporates paragraphs 1 through 50 hereof, as though fully set forth herein.

52. Rudolph has made material false and misleading statements to consumers regarding Anton Paar's polarimeter and its own polarimeter.

53. Rudolph knew or should have known that its statements were false and without factual basis, or that the statements were literally true but likely to mislead or confuse consumers.

54. Rudolph's statements have actually deceived consumers or have a tendency to deceive a substantial portion of the marketplace.

55. Rudolph's deception is material because it causes, or tends to cause the consuming public to wrongfully believe the truth of the representations set forth above.

56. Through its advertising, Rudolph has caused its false and misleading statements to enter interstate commerce.

57. Rudolph's false and misleading advertising violates the common law.

58. As a direct and foreseeable result of Rudolph's misconduct, Anton Paar is entitled to preliminary and permanent injunctive relief against Rudolph, restraining further violations by Rudolph of 15 U.S.C. § 1125(a), an award of Rudolph's profits, damages in the amount of three times the actual damages sustained by Anton Paar, and the costs of this action, including reasonable attorney fees, all in an amount to be determined at trial.

COUNT III
(Unfair Competition)

59. Anton Paar realleges and incorporates paragraphs 1 through 58, as though fully set forth herein.

60. By, among other things, engaging in false advertising, Rudolph has committed acts of unfair competition that have caused Anton Paar substantial monetary damage and substantial and irreparable injury to its business and property.

61. As a direct and foreseeable result of Rudolph's misconduct, Anton Paar has suffered damages in an amount to be determined at trial.

COUNT IV
(Violation of the New Jersey Consumer Fraud Act, N.J. Stat. § 56:8-2)

62. Anton Paar realleges and incorporates paragraphs 1 through 61, as though fully set forth herein.

63. Rudolph's false and misleading statements alleged herein violate the New Jersey Consumer Fraud Act, N.J. Stat. § 56:8-2, which prohibits Rudolph from using or employing, among other things, any act of "deception, fraud, false pretense, false promise, or misrepresentation in its advertising."

64. The false and misleading statements challenged herein relate to characteristics of polarimeters that are material to consumer purchasing decisions.

65. As a direct and foreseeable result of Rudolph's misconduct, Anton Paar has suffered damages in an amount to be determined at trial.

COUNT V
(Trade Libel)

66. Anton Paar realleges and incorporates paragraphs 1 through 65, as though fully set forth herein.

67. Rudolph published false and misleading statements in advertisements to consumers regarding Anton Paar's polarimeter.

68. Those statements were designed to influence consumers to not purchase polarimeters from Anton Paar, or to otherwise interfere with Anton Paar's business relations with consumers.

69. The aforesaid acts are libelous under the laws of the State of New Jersey.

70. As a direct and foreseeable result of Rudolph's misconduct, Anton Paar has suffered damages in an amount to be determined at trial.

COUNT VI
(Tortious Interference with Contractual and Prospective Economic Relations)

71. Anton Paar realleges and incorporates paragraphs 1 through 70, as though fully set forth herein.

72. Anton Paar had reasonable expectations of maintaining contractual and prospective economic relationships with consumers.

73. Rudolph interfered with those expectations by means of its false advertising.

74. The false advertising was committed with the intent to injure Anton Paar's current and future business expectancies with customers and consumers.

75. As a direct and foreseeable result of Rudolph's misconduct, Anton Paar has suffered damages in an amount to be determined at trial.

JURY DEMAND

Anton Paar demands trial by jury on all Counts.

PRAYER FOR RELIEF

WHEREFORE, Anton Paar respectfully requests that this Court enter an order:

1. Preliminarily and permanently enjoining Rudolph and all those in active concert or participation with it (including, but not limited to, its officers, directors, agents, servants, employees, representatives, attorneys, affiliates, subsidiaries, successors and assigns) from making false or misleading statements to any third parties regarding Anton Paar's polarimeter or its own polarimeter.

2. Order that Rudolph withdraw and recall from its sales representatives and its channels of distribution, any and all letters, advertising, promotional materials, flyers, or any other matter distributed by it bearing any false or misleading statements regarding Anton Paar's polarimeter or its own polarimeter.

3. Order that Rudolph account to Anton Paar for its profits and any damages sustained by Anton Paar as a result the foregoing acts of false advertising, unfair competition, trade libel and tortious interference with existing and prospective economic relations.

4. That in accordance with such accounting, Anton Paar be awarded judgment for such profits and not less than three times Anton Paar's actual damages arising from Rudolph's unlawful conduct pursuant to 15 U.S.C. § 1117 and N.J.S.A. 56:8-19.

5. Order that Rudolph and all those in active concert or participation with it (including, but not limited to, its officers, directors, agents, servants, employees, representatives, attorneys, affiliates, subsidiaries, successors and assigns) take affirmative steps to dispel such false impressions that have been created by the false advertising described above, including, but not limited to, corrective advertising.

6. Order that Anton Paar have and recover its costs, including reasonable attorneys' fees and disbursements in this action, pursuant to 15 U.S.C. § 1117 and N.J.S.A. 56:8-19.

7. Order that Anton Paar have such other relief as the Court may deem just and proper.

Dated: Short Hills, New Jersey
June 27, 2016

DLA PIPER LLP (US)

By: s/ James V. Noblett
James V. Noblett
Robert W. Ferguson
51 John F. Kennedy Parkway, Suite 120
Short Hills, NJ 07078
(973) 520-2571

*Attorneys for Plaintiff
Anton Paar OptoTec GmbH*